

## Erbium Doped Fiber Amplifier Polarization Maintaining for C-Band



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For customized projects please Contact us:

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## EDFA Polarization Maintaining for C-Band (Standard Model)

SIMTRUM's Polarization Maintaining Erbium-Doped Fiber Amplifier (STEDFA-PM) is designed for polarization-maintaining fiber systems, offering full polarization, high gain, and high power. It supports remote control via software, and its compact size facilitates easy integration. Available in both desktop and modular formats, with customizable parameters to meet specific needs.

### Features

- High Polarization Extinction Ratio
- High Gain Factor
- High Power Output

### Application

- Optical Fiber Communication
- Fiber sensing
- Fiber laser



### Specifications

Optical Parameters	Unit	Typical Value			Remarks
Model	-	STEDFA-C-PA-PM	STEDFA-C-BA-PM	STEDFA-C-LA-PM	
Operating Wavelength	nm	1530~1565			
Input Signal Power	dBm	-45 ~ -25	-6 ~ +3	-25 ~ +3	Customizable
Saturation Output Power	dBm	14			@-3dBm input
			17/20/23/25/26	17/20/23/25/26	@-10dBm input
Small Signal Gain	dB	≥30/35/45	≥25	≥25	
Noise Figure	dB	≤5	≤5	≤5	
Polarization Extinction Ratio	dB	23(Type), 20(Min)			Slow axis works, fast axis cuts off
Polarization Mode Dispersion	ps	0.5			
Input/output Isolation	dB	>35			
Optical Power Monitoring	-	Output optical power monitoring			
Optical Fiber	-	PM1550			
Fiber Connectors	-	FC/APC			Slow axis alignment
Control Mode	-	ACC/ APC/AGC			

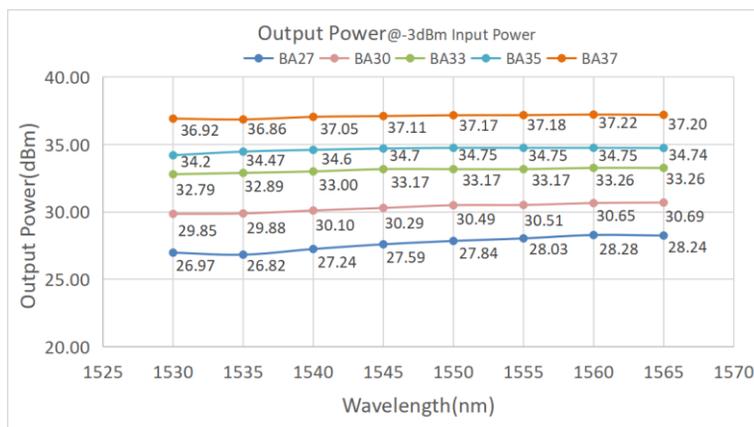
## Specifications

General Parameters	Benchtop	Module
Control Function	Keystroke/ RS232 serial communication	RS232 serial communication
Remote Control Port	DB9 Female	DB9 Female
Power Supply	AC100~240V, <30W	DC5V, <15W
Dimensions	260(W)×280(D)×120(H)mm	125(W)×150(D)×20(H)mm
Operation Temperature	-5~+35°C	
Operation Humidity	0~70%	

Ordering Information/ Product Code					
Series	Wavelength(nm)	Amplifier Type	Output Power	Fiber	Packaging
STEDFA	C = C-band	PA = Small Singal Amplifier	Gain	PM = PM1550	M - Module
			30/35/45 dB		
		BA = Power Amplifier LA = Line Amplifier	Saturated Power		B - Desktop
			17/20/23/25/26 dBm		

## EDFA Polarization Maintaining for C-Band (High Power Model)

SIMTRUM's High Power Polarization Maintaining Erbium-Ytterbium Doped Fiber Amplifier (STEYDFA-HP) utilizes a unique optical path design and reliable high-power laser heat dissipation to deliver high-power laser output in the 1535-1565nm range. This amplifier offers high power with low noise, making it ideal for fiber communication and LIDAR applications. Available in both desktop and modular formats, it supports remote software control and is compact for easy integration.



### Features

- High Polarization Extinction Ratio
- High Gain Factor
- High Power Output (up to 10 watts)

### Application

- Optical Fiber Communication
- Fiber sensing
- Fiber laser

### Specifications

Optical Parameters	Unit	Typical Value	Remarks
Operating Wavelength	nm	1535~1565	can be customized
Input Signal Power	dBm	-6 ~ +10	
Saturation Output Power	dBm	27/30/33/35/37/40	@0dBm input
Output Power Adjustable	-	10% ~ 100%	
Noise Figure	dB	<6.0	@0dBm input
Polarization Extinction Ratio	dB	23(Type), 20(Min)	
Input/output Isolation	dB	>35	
Optical Power Monitoring	-	Input Power, Output Power	
Optical Fiber	-	PM1550	
Fiber connectors	-	FC/APC	For power test only
Control mode		ACC/APC	

## Specifications

General Parameters		Benchtop	Module
Control Function		Keystroke/ RS232 serial communication	RS232 serial communication
Remote Control Port		DB9 Female	DB9 Female
Power Supply		AC100~240V, <150W	DC5V, <60W
Dimensions	Power 27/30/33 dBm	260(W)×320(D)×120(H)mm	125(W)×150(D)×31.5(H)mm
	Power 35/37/40 dBm	360(W)×350(D)×120(H)mm	139(W)×235(D)×70(H)mm
Operation Temperature		-5~+35°C	
Operation Humidity		0~70%	

## Ordering Information/ Product Code

Series	Wavelength(nm)	Amplifier Type	Output Power (dBm)	Fiber	Packaging
STEYDFA	C = C-band	HP-BA = High Power BA Amplifier	27/30/33/35/37/40	PM = PM1550	M - Module
					B - Desktop